Engineering Analysis
Cargill, Inc
Decatur, Alabama
Facility No. 712-0039

On January 14, 2010, the Department received an Air Permit application from Cargill, Inc. in Decatur, Alabama. Cargill is submitting this application requesting to obtain synthetic minor status for the Decatur facility that previously held a Major Source Operating Permit (MSOP).

Facility Description:

Cargill, Inc. owns and operated a wet corn milling facility in Decatur, Alabama. In 2009, Cargill ceased its wet corn milling operation at the Decatur facility and elected not to renew their MSOP. Below is a list of the units that were apart of the wet corn milling process:

S-001	Barge Unloading System with Baghouse
S-002	Grain Storage and Handling Facility with Baghouse
S-003	Corn Unloading System with Baghouse
S-004	Co-Products Loadout with Baghouse
F-004	Product Drop-out Fugitives
S-006	Dry Co-Product Transfer and Storage System with Four (4) Baghouses
S-102	One (1) Gluten Meal Dryer with Four (4) Product Recovery Cyclones controlled by One (1) Wet Scrubber
S-103	T-30 Vent System
S-122	Gluten Meal Cooler with Baghouse
S-124	Gluten Feed Milling Process with Baghouse
S-125	Corn Dust Transfer and Receiving System with Baghouse
S-126	One (1) – 15.0 MMBtu/hr Fiber Dryer with One (1) Product Recovery Cyclone controlled by One (1) Wet Scrubber
S-127	One (1) – 50.0 MMBtu/hr Gluten Feed Dryer with Two (2) Product Recovery Cyclones controlled by One (1) Wet Scrubber
S-128	North Germ Dryer
S-129	South Germ Dryer
S-201 thru S-205	Dry Starch Transfer, Blending, and Five (5) Storage Bins controlled by Five (5) Baghouses
S-206	Starch Dryer with Two (2) Product Recovery Cyclones controlled by One (1) Wet Scrubber
S-207 & S-208	Dry Starch Loadout controlled by Two (2) Baghouses
S-301	Soda Ash Storage and Unloading System controlled by One (1) Wet Scrubber
S-303	Precoat Storage and Unloading System controlled by One (1) Baghouse
S-327	Precoat Transfer and Use System
S-341 & S-342	No. 1 and No. 2 Carbon Regeneration Furnaces controlled by Two (2) Wet Scrubbers
S-108	Steeping Process
S-410 & S-413	Storage Tanks
S-411	One (1) - 97.6 MMBtu/hr Nebraska Boiler
S-412	One (1) – 122.1 MMBtu/hr Trane/Murray Boiler
S-407	One (1) – 179.74 MMBtu/hr Keeler Stoker Boiler

Project Description:

Cargill is submitting a request to obtain a Synthetic Minor Operating Permit (SMOP) to cover several unloading and loading existing sources that will be retained despite the shutdown of the wet corn milling operations. The facility is requesting federally enforceable permit restrictions for regulated criteria pollutants emissions, including particulate matter, of less than 100 tons per year.

The proposed project involves four sources at the Decatur facility which involves the storage of grain-related agricultural products. Grain is received by barge, rail and/or truck and is unloaded, weighed, and distributed to one of eleven silos for storage. Cargill requests that the following sources be covered under a SMOP. Other units listed above will be or have been removed from the site.

S-001	Barge Unloading System with Baghouse
S-002	Grain Storage and Handling Facility with Baghouse
S-003	Grain Unloading System with Baghouse
S-004	Grain Co-Products Loadout with Baghouse

Emissions:

The main pollutant for these units is particulate matter. The table below is a summary of the emissions from the units. A detail analysis is provided in the Appendix.

Emission Point	Pollutant	Pre-Control Potential Emissions		Controlled Potential Emissions	
		(lb/hr)	(TPY)	(lb/hr)	(TPY)
S-001	PM	52.5	230.0	0.53	2.30
S-002	PM	21.4	93.50	0.21	0.94
S-003	PM	63.0	275.9	0.63	2.76
S-004	PM	5.89	25.80	0.06	0.26
				TOTAL	6.26

Regulations:

Chapter 4 Section .01 states that no person shall discharge into the atmosphere from any source of emission, particulate of an opacity greater than that designated as twenty (20%) percent opacity, as determined by a six (6) minute average. During one six (6) minute period in any sixty (60) minute period, a person may discharge into the atmosphere from any source of emission, particulate of an opacity not greater than that designated as forty percent (40%) opacity ***(ADEM Admin Code R. 335-4-.01(1)(a)(b))***

Chapter 4 Section .04 states no person shall cause or permit the emission of particulate matter in any one hour from any source in a Class 1 County in excess of the amount that would be determined by the following equation:

$$\mathbf{E = 17.31P^{0.16}}$$

($\mathbf{P} \geq 30$ tons/hr)

where **E** = Emissions in pounds per hour

P = Process weight per hour in tons per hour.

Source	Process Capacity (TPH)	Allowable Emissions (lb/hr)
S-001	350	44.2
S-002	350	44.2
S-003	350	44.2
S-004	68.5	34.0

However, Cargill requests a limit of 90 tons per year facility-wide. Cargill contends that based on the control emissions level above, compliance is demonstrated and assured the use of the control device while the equipment is operating.

Chapter 15 Section .04(2)(b) states limits any facility possessing an Operating Permit or whose potential emissions require it to obtain an Operating Permit may, at any time, accept federally enforceable permit restrictions which would allow it to obtain a Synthetic Minor Operating Permit. ***(ADEM Admin Code R. 335-14-.04(2)(b))***.

Consent Decree No. 05-2037JMR/FLN:

Cargill Decatur entered into a Consent Decree with the USEPA and the State of Alabama on March, 3, 2006. However, the Consent Decree pertained to units that Cargill Inc no longer plans to operate at the Decatur facility.

NSPS:

40 CFR 60 Subpart DD, "*Standards of Performance for Grain Elevators*" applies to each affected facility at any grain terminal elevator or any grain storage elevator which commences construction, modification, or reconstruction after August 3, 1978, except as provided under §60.304(b). The affected facilities are each truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading station, railcar unloading station, grain dryer, and all grain handling operations. Under §60.301(c), grain terminal elevators are defined as any grain elevator having a permanent storage capacity of more than 2.5 million U.S. bushels. Similarly, grain storage elevators are defined under §60.301 (f) as having a permanent storage capacity of 1 million bushels. The total storage for the proposed Decatur facility is less than 1 million bushels. Therefore, these units are not subject to the subpart.

112(g):

Chapter 14 Section .06 applies to major sources of HAPs constructed after March 27, 1998. According to these regulations, a major source of HAPs is defined as one that has the potential to emit 10 TPY of any HAP or 25 TPY of any combination of HAPs. Through this modification, Cargill will be become a "minor" source of HAPs. Therefore, no ***112(g)*** review is deemed necessary.

Title V:

The permitting project would change the status of Cargill Decatur facility from a major source to a "synthetic minor" source.

PSD:

This facility will become a minor source for PSD.

AIR TOXICS PROGRAM:

Air Permit applications submitted by Cargill do not indicate that a significant amount of Air Toxics would be emitted from these units, nor does the Department expect any emissions of significant quantities of Air Toxics to be emitted; therefore, no ***Air Toxics*** Review was not performed for this project.

CLASS 1 AREA:

The closest ***Class I*** area, the Sipsey Wilderness, is within 100 km of the facility. The facility emissions level will be reducing as a result of emission limitation and equipment removal.

Recommendations:

Pending the resolution of any comments received during the public comment period and receipt of permitting fees, I recommend that Synthetic Minor Operating Permit Nos. X001-X004 be granted to Cargill Inc for the units mentioned above.

Dewayne Gaines
Energy Branch
Industrial Minerals Section
Air Division

February 9, 2010
Date

Appendix

EMISSION SUMMARY

S-001 BARGE UNLOADING SYSTEM WITH BAGHOUSE

The Barge Unloading System involves the unloading of grain by marine leg onto a conveyor belt where it is transported to grain elevator for storage. The Barge Unloading System currently has an operational capacity of 700,000 pounds per hour (lb/hr) or 350 tons per hour (tph) based on a maximum unloading rate of 12,500 bushels per hour. Particulate matter (PM) emissions are controlled by a baghouse. Potential emissions are calculated assuming 99% control and AP-42 emission factors from Table 9.9.1-1 for Grain Elevators. The expected uncontrolled emissions are as follows:

Uncontrolled Hourly Potential to Emit: Rated Capacity tph $\times$ Emission Factor $\frac{\text{lb}}{\text{ton}}$

Uncontrolled Hourly Potential to Emit: 350 tph $\times$ 0.15 $\frac{\text{lb}}{\text{ton}}$

Uncontrolled Hourly Potential to Emit: $52.5\frac{\text{lb}}{\text{hr}}$

Controlled Hourly Potential to Emit: Hourly Emission Rate $\frac{\text{lb}}{\text{hr}}$ $\times$ control efficiency

Controlled Hourly Potential to Emit: $52.5\frac{\text{lb}}{\text{hr}} \times (1 - 0.99)$

Controlled Hourly Potential to Emit: $0.53\frac{\text{lb}}{\text{hr}}$

Uncontrolled Annual Potential to Emit: hourly uncontrolled rate $\frac{\text{lb}}{\text{hr}} \times 8{,}760\ \frac{\text{hr}}{\text{yr}} \div 2{,}000\ \frac{\text{lb}}{\text{ton}}$

Uncontrolled Annual Potential to Emit: $52.5\frac{\text{lb}}{\text{hr}} \times 8760\frac{\text{hr}}{\text{yr}} \div 2{,}000\text{lb/ton}$

Uncontrolled Annual Potential to Emit: 229.95 tpy

Controlled Annual Potential to Emit: Uncontrolled Annual rate tpy $\times$ control efficiency

Controlled Annual Potential to Emit: 229.95 tpy $\times (1 - 0.99)$

Controlled Annual Potential to Emit: 2.30 tpy

S-002 Grain Storage and Handling Facility with Baghouse

The Grain Storage and Handling Facility involves the receiving, weighing, and distribution of grain brought on-site to one of eleven silos for storage. The Grain Storage and Handling Facility has an operational capacity of 700,000 pounds per hour (lb/hr) or 350 tons per hour (tph), the same as the unloading operations. Particulate matter (PM) emissions are controlled by a baghouse. Potential emissions are calculated assuming 99% control and AP-42 emission factors from Table 9.9.1-1 for grain handling, and the expected uncontrolled emissions are as follows:

Uncontrolled Hourly Potential to Emit: Rated Capacity tph $\times$ Emission Factor $\frac{\text{lb}}{\text{ton}}$

Uncontrolled Hourly Potential to Emit: $350 \text{ tph} \times 0.061 \frac{\text{lb}}{\text{ton}}$

Uncontrolled Hourly Potential to Emit: $21.35 \frac{\text{lb}}{\text{hr}}$

Controlled Hourly Potential to Emit: Hourly Emission Rate $\frac{\text{lb}}{\text{hr}} \times$ control efficiency

Controlled Hourly Potential to Emit: $21.35 \frac{\text{lb}}{\text{hr}} \times (1 - 0.99)$

Controlled Hourly Potential to Emit: $0.21 \frac{\text{lb}}{\text{hr}}$

Uncontrolled Annual Potential to Emit: hourly uncontrolled rate $\frac{\text{lb}}{\text{hr}} \times 8{,}760 \frac{\text{hr}}{\text{yr}} \div 2{,}000 \frac{\text{lb}}{\text{ton}}$

Uncontrolled Annual Potential to Emit: $21.35 \frac{\text{lb}}{\text{hr}} \times 8{,}760 \frac{\text{hr}}{\text{yr}} \div 2{,}000 \frac{\text{lb}}{\text{ton}}$

Uncontrolled Annual Potential to Emit: 93.51 tpy

Controlled Annual Potential to Emit: Uncontrolled Annual rate tpy $\times$ control efficiency

Controlled Annual Potential to Emit: $93.51 \text{ tpy} \times (1 - 0.99)$

Controlled Annual Potential to Emit: 0.94 tpy

S-003 GRAIN UNLOADING SYSTEM WITH BAGHOUSE

The Grain Unloading System transports grain received by barge, rail or truck to the storage elevator. Grain falls through a grate into a pit onto a conveyor belt. The system has an operational capacity of 700,000 pounds per hour (lb/hr) or 350 tons per hour (tph) which results from barge unloading. Particulate matter (PM) emissions are controlled by a baghouse. Potential emissions are calculated assuming 99% control and AP-42 emission factors from Table 9.9.1-1 for truck unloading using the worst-case factor for straight truck grain receiving. The expected uncontrolled emissions are as follows:

Uncontrolled Hourly Potential to Emit: Rated Capacity tph × Emission Factor $\frac{\text{lb}}{\text{ton}}$

Uncontrolled Hourly Potential to Emit: 350 tph × 0.18 $\frac{\text{lb}}{\text{ton}}$

Uncontrolled Hourly Potential to Emit: $63.0\frac{\text{lb}}{\text{hr}}$

Controlled Hourly Potential to Emit: Hourly Emission Rate lb/hr × control efficiency

Controlled Hourly Potential to Emit: $63.0\frac{\text{lb}}{\text{hr}} \times (1 - 0.99)$

Controlled Hourly Potential to Emit: $0.63\frac{\text{lb}}{\text{hr}}$

Uncontrolled Annual Potential to Emit: hourly uncontrolled rate $\frac{\text{lb}}{\text{hr}} \times 8{,}760\ \frac{\text{hr}}{\text{yr}} \div 2{,}000\ \frac{\text{lb}}{\text{ton}}$

Uncontrolled Annual Potential to Emit: $63.0\frac{\text{lb}}{\text{hr}} \times 8{,}760\frac{\text{hr}}{\text{yr}} \div 2{,}000\ \frac{\text{lb}}{\text{ton}}$

Uncontrolled Annual Potential to Emit: 275.94 tpy

Controlled Annual Potential to Emit: Uncontrolled Annual rate tpy × control efficiency

Controlled Annual Potential to Emit: 275.94 (tpy) × (1 − 0.99)

Controlled Annual Potential to Emit: 2.76 tpy

S-004 Grain Loadout with Baghouse

Emission Source S-004 was formerly permitted for Co-Products Loadout, however Cargill is requesting that the Loadout process be permitted under the SMOP for all grain materials. Under this source, the facility will loadout all grain stored onsite from storage bins onto rail cars or trucks. The system has a maximum throughput of 68.5 tons per hour (tph) from a maximum capability of 137,000 lb/hr. Particulate matter (PM) emissions are controlled by a baghouse. Potential emissions are calculated using AP-42, Table 9.9.1-1 for truck grain shipping, and particulate control is 99%. The expected uncontrolled emissions are as follows:

Uncontrolled Hourly Potential to Emit: Rated Capacity tph $\times$ emission factor $\frac{\text{lb}}{\text{ton}}$

Uncontrolled Hourly Potential to Emit: 68.5 tph $\times$ 0.086 $\frac{\text{lb}}{\text{ton}}$

Uncontrolled Hourly Potential to Emit: $5.89\frac{\text{lb}}{\text{hr}}$

Controlled Hourly Potential to Emit: Hourly Emission Rate $\frac{\text{lb}}{\text{hr}}$ $\times$ control efficiency

Controlled Hourly Potential to Emit: $5.89\frac{\text{lb}}{\text{hr}} \times (1 - 0.99)$

Controlled Hourly Potential to Emit: $0.059\frac{\text{lb}}{\text{hr}}$

Uncontrolled Annual Potential to Emit: hourly uncontrolled rate $\frac{\text{lb}}{\text{hr}} \times 8{,}760\ \frac{\text{hr}}{\text{yr}} \div 2{,}000\ \frac{\text{lb}}{\text{ton}}$

Uncontrolled Annual Potential to Emit: $5.89\frac{\text{lb}}{\text{hr}} \times 8{,}760\frac{\text{hr}}{\text{yr}} \div 2{,}000\ \frac{\text{lb}}{\text{ton}}$

Uncontrolled Annual Potential to Emit: 25.80 tpy

Controlled Annual Potential to Emit: Uncontrolled Annual rate tpy $\times$ control efficiency

Controlled Annual Potential to Emit: 25.80 tpy $\times (1 - 0.99)$

Controlled Annual Potential to Emit: 0.26 tpy

Proposed Provisos (Nos. X001-X004)

Alabama Department of Environmental Management

SYNTHETIC MINOR OPERATING PERMIT

PERMITTEE: CARGILL, INC.

FACILITY NAME: CARGILL, INC.

LOCATION: DECATUR, ALABAMA

PERMIT NUMBER	DESCRIPTION OF EQUIPMENT, ARTICLE OR DEVICE
712-0039-X004	GRAIN CO-PRODUCTS LOADOUT WITH BAGHOUSE

In accordance with and subject to the provisions of the Alabama Air Pollution Control Act of 1971, as amended, Ala. Code §§22-28-1 to 22-28-23 (2006 Rplc. Vol. and 2007 Cum. Supp.) (the "AAPCA") and the Alabama Environmental Management Act, as amended, Ala. Code §§22-22A-1 to 22-22A-15 (2006 Rplc. Vol. and 2007 Cum. Supp.), and rules and regulations adopted there under, and subject further to the conditions set forth in this permit, the Permittee is hereby authorized to construct, install and use the equipment, device or other article described above.

ISSUANCE DATE: DRAFT

Alabama Department of Environmental Management

CARGILL, INC.
DECATUR, ALABAMA
(PERMIT NO. 712-0039-X004)
PROVISOS

1. This permit is issued on the basis of Rules and Regulations existing on the date of issuance. In the event additional Rules and Regulations are adopted, it shall be the permit holder's responsibility to comply with such rules.

2. This permit is not transferable. Upon sale or legal transfer, the new owner or operator must apply for a permit within 30 days.

3. A new permit application must be made for new sources, replacements, alterations or design changes which may result in the issuance of, or an increase in the issuance of, air contaminants, or the use of which may eliminate or reduce or control the issuance of air contaminants.

4. Each point of emission will be provided with sampling ports, ladders, platforms, and other safety equipment to facilitate testing performed in accordance with procedures established by Part 60 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised.

5. In case of shutdown of air pollution control equipment for scheduled maintenance for a period greater than **1 hour,** the intent to shut down shall be reported to the Air Division at least 24 hours prior to the planned shutdown, **unless accompanied by the immediate shutdown of the emission source.**

6. In the event there is a breakdown of equipment in such a manner as to cause increased emission of air contaminants for a period greater than **1 hour**, the person responsible for such equipment shall notify the Air Division within an additional 24 hours and provide a statement giving all pertinent facts, including the duration of the breakdown. The Air Division shall be notified when the breakdown has been corrected.

7. This process, including all air pollution control devices and capture systems for which this permit is issued, shall be maintained and operated at all times in a manner so as to minimize the emissions of air contaminants. Procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emission of air contaminants shall be established.

8. Submittal of other reports regarding monitoring records, fuel analyses, operating rates, and equipment malfunctions may be required as authorized in the Department's air pollution control rules and regulations. The Department may require stack emission testing at any time.

9. Additions and revisions to the conditions of this Permit will be made, if necessary, to ensure that the Department's air pollution control rules and regulations are not violated.

10. Nothing in this permit or conditions thereto shall negate any authority granted to the Air Division pursuant to the Alabama Environmental Management Act or regulations issued thereunder.

11. The Air Division must be notified in writing at least 10 working days in advance of all emission tests to be conducted and submitted as proof of compliance with the Department's air pollution control rules and regulations.

    To avoid problems concerning testing methods and procedures, the following shall be included with the notification letter:

(a) The date the test crew is expected to arrive, the date and time anticipated of the start of the first run, how many and which sources are to be tested, and the names of the persons and/or testing company that will conduct the tests.

(b) A complete description of each sampling train to be used, including type of media used in determining gas stream components, type of probe lining, type of filter media, and probe cleaning method and solvent to be used (if test procedure requires probe cleaning).

(c) A description of the process(es) to be tested, including the feed rate, any operating parameter used to control or influence the operations, and the rated capacity.

(d) A sketch or sketches showing sampling point locations and their relative positions to the nearest upstream and downstream gas flow disturbances.

A pretest meeting may be held at the request of the source owner or the Department. The necessity for such a meeting and the required attendees will be determined on a case-by-case basis.

All test reports must be submitted to the Air Division within 30 days of the actual completion of the test, unless an extension of time is specifically approved by the Air Division.

12. Any performance tests required shall be conducted and data reduced in accordance with the test methods and procedures contained in each specific permit condition unless the Director (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) approves the use of an equivalent method, or (3) approves the use of an alternative method, the results of which he has determined to be adequate for indicating whether a specific source is in compliance.

13. This permit is issued with the condition that, should obnoxious odors arising from the plant operations be verified by Air Division inspectors, measures to abate the odorous emissions shall be taken upon a determination by the Alabama Department of Environmental Management that these measures are technically and economically feasible.

14. Precautions shall be taken to prevent fugitive dust emanating from plant roads, grounds, stockpiles, screens, dryers, hoppers, ductwork, etc.

Plant or haul roads and grounds will be maintained in the following manner so that dust will not become airborne. A minimum of one, or a combination, of the following methods shall be utilized to minimize airborne dust from plant or haul roads and grounds:

(a) by the application of water any time the surface of the road is sufficiently dry to allow the creation of dust emissions by the act of wind or vehicular traffic;

(b) by reducing the speed of vehicular traffic to a point below that at which dust emissions are created;

(c) by paving;

(d) by the application of binders to the road surface at any time the road surface is found to allow the creation of dust emissions;

Should one, or a combination, of the above methods fail to adequately reduce airborne dust from plant or haul roads and grounds, alternative methods shall be employed, either exclusively or in combination with one or all of the above control techniques, so that dust will not become airborne. Alternative methods shall be approved by the Department prior to utilization.

15. Precautions shall be taken by the permittee and its personnel to ensure that no person shall ignite, cause to be ignited, permit to be ignited, or maintain any open fire in such a manner as to cause the Department's rules and regulations applicable to open burning to be violated.

16. In accordance with ADEM Admin. Code. r. 335-3-4-.01(1), any source of particulate emissions shall not discharge more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%. Opacity shall be determined by 40 CFR Part 60, Appendix A, Method 9.

17. The permittee shall not use as a defense in an enforcement action that maintaining compliance with conditions of this permit would have required halting or reducing the permitted activity.

18. The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege.

19. The particulate matter (PM) emissions from facility shall not exceed 90 tons per year.

20. This source shall not operate unless emissions are vented to the control device.

Alabama Department of Environmental Management

SYNTHETIC MINOR OPERATING PERMIT

PERMITTEE: CARGILL, INC.

FACILITY NAME: CARGILL, INC.

LOCATION: DECATUR, ALABAMA

PERMIT NUMBER	DESCRIPTION OF EQUIPMENT, ARTICLE OR DEVICE
712-0039-X003	GRAIN UNLOADING SYSTEM WITH BAGHOUSE

In accordance with and subject to the provisions of the Alabama Air Pollution Control Act of 1971, as amended, Ala. Code §§22-28-1 to 22-28-23 (2006 Rplc. Vol. and 2007 Cum. Supp.) (the "AAPCA") and the Alabama Environmental Management Act, as amended, Ala. Code §§22-22A-1 to 22-22A-15 (2006 Rplc. Vol. and 2007 Cum. Supp.), and rules and regulations adopted there under, and subject further to the conditions set forth in this permit, the Permittee is hereby authorized to construct, install and use the equipment, device or other article described above.

ISSUANCE DATE: DRAFT

Alabama Department of Environmental Management

CARGILL, INC.
DECATUR, ALABAMA
(PERMIT NO. 712-0039-X003)
PROVISOS

1. This permit is issued on the basis of Rules and Regulations existing on the date of issuance. In the event additional Rules and Regulations are adopted, it shall be the permit holder's responsibility to comply with such rules.

2. This permit is not transferable. Upon sale or legal transfer, the new owner or operator must apply for a permit within 30 days.

3. A new permit application must be made for new sources, replacements, alterations or design changes which may result in the issuance of, or an increase in the issuance of, air contaminants, or the use of which may eliminate or reduce or control the issuance of air contaminants.

4. Each point of emission will be provided with sampling ports, ladders, platforms, and other safety equipment to facilitate testing performed in accordance with procedures established by Part 60 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised.

5. In case of shutdown of air pollution control equipment for scheduled maintenance for a period greater than **1 hour,** the intent to shut down shall be reported to the Air Division at least 24 hours prior to the planned shutdown, **unless accompanied by the immediate shutdown of the emission source.**

6. In the event there is a breakdown of equipment in such a manner as to cause increased emission of air contaminants for a period greater than **1 hour**, the person responsible for such equipment shall notify the Air Division within an additional 24 hours and provide a statement giving all pertinent facts, including the duration of the breakdown. The Air Division shall be notified when the breakdown has been corrected.

7. This process, including all air pollution control devices and capture systems for which this permit is issued, shall be maintained and operated at all times in a manner so as to minimize the emissions of air contaminants. Procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emission of air contaminants shall be established.

8. Submittal of other reports regarding monitoring records, fuel analyses, operating rates, and equipment malfunctions may be required as authorized in the Department's air pollution control rules and regulations. The Department may require stack emission testing at any time.

9. Additions and revisions to the conditions of this Permit will be made, if necessary, to ensure that the Department's air pollution control rules and regulations are not violated.

10. Nothing in this permit or conditions thereto shall negate any authority granted to the Air Division pursuant to the Alabama Environmental Management Act or regulations issued thereunder.

11. The Air Division must be notified in writing at least 10 working days in advance of all emission tests to be conducted and submitted as proof of compliance with the Department's air pollution control rules and regulations.

    To avoid problems concerning testing methods and procedures, the following shall be included with the notification letter:

(a) The date the test crew is expected to arrive, the date and time anticipated of the start of the first run, how many and which sources are to be tested, and the names of the persons and/or testing company that will conduct the tests.

(b) A complete description of each sampling train to be used, including type of media used in determining gas stream components, type of probe lining, type of filter media, and probe cleaning method and solvent to be used (if test procedure requires probe cleaning).

(c) A description of the process(es) to be tested, including the feed rate, any operating parameter used to control or influence the operations, and the rated capacity.

(d) A sketch or sketches showing sampling point locations and their relative positions to the nearest upstream and downstream gas flow disturbances.

A pretest meeting may be held at the request of the source owner or the Department. The necessity for such a meeting and the required attendees will be determined on a case-by-case basis.

All test reports must be submitted to the Air Division within 30 days of the actual completion of the test, unless an extension of time is specifically approved by the Air Division.

12. Any performance tests required shall be conducted and data reduced in accordance with the test methods and procedures contained in each specific permit condition unless the Director (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) approves the use of an equivalent method, or (3) approves the use of an alternative method, the results of which he has determined to be adequate for indicating whether a specific source is in compliance.

13. This permit is issued with the condition that, should obnoxious odors arising from the plant operations be verified by Air Division inspectors, measures to abate the odorous emissions shall be taken upon a determination by the Alabama Department of Environmental Management that these measures are technically and economically feasible.

14. Precautions shall be taken to prevent fugitive dust emanating from plant roads, grounds, stockpiles, screens, dryers, hoppers, ductwork, etc.

Plant or haul roads and grounds will be maintained in the following manner so that dust will not become airborne. A minimum of one, or a combination, of the following methods shall be utilized to minimize airborne dust from plant or haul roads and grounds:

(a) by the application of water any time the surface of the road is sufficiently dry to allow the creation of dust emissions by the act of wind or vehicular traffic;

(b) by reducing the speed of vehicular traffic to a point below that at which dust emissions are created;

(c) by paving;

(d) by the application of binders to the road surface at any time the road surface is found to allow the creation of dust emissions;

Should one, or a combination, of the above methods fail to adequately reduce airborne dust from plant or haul roads and grounds, alternative methods shall be employed, either exclusively or in combination with one or all of the above control techniques, so that dust will not become airborne. Alternative methods shall be approved by the Department prior to utilization.

15. Precautions shall be taken by the permittee and its personnel to ensure that no person shall ignite, cause to be ignited, permit to be ignited, or maintain any open fire in such a manner as to cause the Department's rules and regulations applicable to open burning to be violated.

16. In accordance with ADEM Admin. Code. r. 335-3-4-.01(1), any source of particulate emissions shall not discharge more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%. Opacity shall be determined by 40 CFR Part 60, Appendix A, Method 9.

17. The permittee shall not use as a defense in an enforcement action that maintaining compliance with conditions of this permit would have required halting or reducing the permitted activity.

18. The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege.

19. The particulate matter (PM) emissions from facility shall not exceed 90 tons per year.

20. This source shall not operate unless emissions are vented to the control device.

ADEM
Alabama Department of Environmental Management

SYNTHETIC MINOR OPERATING PERMIT

PERMITTEE: CARGILL, INC.

FACILITY NAME: CARGILL, INC.

LOCATION: DECATUR, ALABAMA

PERMIT NUMBER	DESCRIPTION OF EQUIPMENT, ARTICLE OR DEVICE
712-0039-X002	GRAIN STORAGE AND HANDLING FACILITY WITH BAGHOUSE

In accordance with and subject to the provisions of the Alabama Air Pollution Control Act of 1971, as amended, Ala. Code §§22-28-1 to 22-28-23 (2006 Rplc. Vol. and 2007 Cum. Supp.) (the "AAPCA") and the Alabama Environmental Management Act, as amended, Ala. Code §§22-22A-1 to 22-22A-15 (2006 Rplc. Vol. and 2007 Cum. Supp.), and rules and regulations adopted there under, and subject further to the conditions set forth in this permit, the Permittee is hereby authorized to construct, install and use the equipment, device or other article described above.

ISSUANCE DATE: DRAFT

Alabama Department of Environmental Management

CARGILL, INC
DECATUR, ALABAMA
(PERMIT NO. 712-0039-X002)
PROVISOS

1. This permit is issued on the basis of Rules and Regulations existing on the date of issuance. In the event additional Rules and Regulations are adopted, it shall be the permit holder's responsibility to comply with such rules.

2. This permit is not transferable. Upon sale or legal transfer, the new owner or operator must apply for a permit within 30 days.

3. A new permit application must be made for new sources, replacements, alterations or design changes which may result in the issuance of, or an increase in the issuance of, air contaminants, or the use of which may eliminate or reduce or control the issuance of air contaminants.

4. Each point of emission will be provided with sampling ports, ladders, platforms, and other safety equipment to facilitate testing performed in accordance with procedures established by Part 60 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised.

5. In case of shutdown of air pollution control equipment for scheduled maintenance for a period greater than **1 hour,** the intent to shut down shall be reported to the Air Division at least 24 hours prior to the planned shutdown, **unless accompanied by the immediate shutdown of the emission source.**

6. In the event there is a breakdown of equipment in such a manner as to cause increased emission of air contaminants for a period greater than **1 hour**, the person responsible for such equipment shall notify the Air Division within an additional 24 hours and provide a statement giving all pertinent facts, including the duration of the breakdown. The Air Division shall be notified when the breakdown has been corrected.

7. This process, including all air pollution control devices and capture systems for which this permit is issued, shall be maintained and operated at all times in a manner so as to minimize the emissions of air contaminants. Procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emission of air contaminants shall be established.

8. Submittal of other reports regarding monitoring records, fuel analyses, operating rates, and equipment malfunctions may be required as authorized in the Department's air pollution control rules and regulations. The Department may require stack emission testing at any time.

9. Additions and revisions to the conditions of this Permit will be made, if necessary, to ensure that the Department's air pollution control rules and regulations are not violated.

10. Nothing in this permit or conditions thereto shall negate any authority granted to the Air Division pursuant to the Alabama Environmental Management Act or regulations issued thereunder.

11. The Air Division must be notified in writing at least 10 working days in advance of all emission tests to be conducted and submitted as proof of compliance with the Department's air pollution control rules and regulations.

    To avoid problems concerning testing methods and procedures, the following shall be included with the notification letter:

(a) The date the test crew is expected to arrive, the date and time anticipated of the start of the first run, how many and which sources are to be tested, and the names of the persons and/or testing company that will conduct the tests.

(b) A complete description of each sampling train to be used, including type of media used in determining gas stream components, type of probe lining, type of filter media, and probe cleaning method and solvent to be used (if test procedure requires probe cleaning).

(c) A description of the process(es) to be tested, including the feed rate, any operating parameter used to control or influence the operations, and the rated capacity.

(d) A sketch or sketches showing sampling point locations and their relative positions to the nearest upstream and downstream gas flow disturbances.

A pretest meeting may be held at the request of the source owner or the Department. The necessity for such a meeting and the required attendees will be determined on a case-by-case basis.

All test reports must be submitted to the Air Division within 30 days of the actual completion of the test, unless an extension of time is specifically approved by the Air Division.

12. Any performance tests required shall be conducted and data reduced in accordance with the test methods and procedures contained in each specific permit condition unless the Director (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) approves the use of an equivalent method, or (3) approves the use of an alternative method, the results of which he has determined to be adequate for indicating whether a specific source is in compliance.

13. This permit is issued with the condition that, should obnoxious odors arising from the plant operations be verified by Air Division inspectors, measures to abate the odorous emissions shall be taken upon a determination by the Alabama Department of Environmental Management that these measures are technically and economically feasible.

14. Precautions shall be taken to prevent fugitive dust emanating from plant roads, grounds, stockpiles, screens, dryers, hoppers, ductwork, etc.

Plant or haul roads and grounds will be maintained in the following manner so that dust will not become airborne. A minimum of one, or a combination, of the following methods shall be utilized to minimize airborne dust from plant or haul roads and grounds:

(a) by the application of water any time the surface of the road is sufficiently dry to allow the creation of dust emissions by the act of wind or vehicular traffic;

(b) by reducing the speed of vehicular traffic to a point below that at which dust emissions are created;

(c) by paving;

(d) by the application of binders to the road surface at any time the road surface is found to allow the creation of dust emissions;

Should one, or a combination, of the above methods fail to adequately reduce airborne dust from plant or haul roads and grounds, alternative methods shall be employed, either exclusively or in combination with one or all of the above control techniques, so that dust will not become airborne. Alternative methods shall be approved by the Department prior to utilization.

15. Precautions shall be taken by the permittee and its personnel to ensure that no person shall ignite, cause to be ignited, permit to be ignited, or maintain any open fire in such a manner as to cause the Department's rules and regulations applicable to open burning to be violated.

16. In accordance with ADEM Admin. Code. r. 335-3-4-.01(1), any source of particulate emissions shall not discharge more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%. Opacity shall be determined by 40 CFR Part 60, Appendix A, Method 9.

17. The permittee shall not use as a defense in an enforcement action that maintaining compliance with conditions of this permit would have required halting or reducing the permitted activity.

18. The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege.

19. The particulate matter (PM) emissions from facility shall not exceed 90 tons per year.

20. This source shall not operate unless emissions are vented to the control device.

Alabama Department of Environmental Management

SYNTHETIC MINOR OPERATING PERMIT

PERMITTEE: CARGILL, INC.

FACILITY NAME: CARGILL, INC.

LOCATION: DECATUR, ALABAMA

PERMIT NUMBER	DESCRIPTION OF EQUIPMENT, ARTICLE OR DEVICE
712-0039-X001	BARGE UNLOADING SYSTEM WITH BAGHOUSE

In accordance with and subject to the provisions of the Alabama Air Pollution Control Act of 1971, as amended, Ala. Code §§22-28-1 to 22-28-23 (2006 Rplc. Vol. and 2007 Cum. Supp.) (the "AAPCA") and the Alabama Environmental Management Act, as amended, Ala. Code §§22-22A-1 to 22-22A-15 (2006 Rplc. Vol. and 2007 Cum. Supp.), and rules and regulations adopted there under, and subject further to the conditions set forth in this permit, the Permittee is hereby authorized to construct, install and use the equipment, device or other article described above.

ISSUANCE DATE: DRAFT

Alabama Department of Environmental Management

CARGILL, INC.
DECATUR, ALABAMA
(PERMIT NO. 712-0039-X001)
PROVISOS

1. This permit is issued on the basis of Rules and Regulations existing on the date of issuance. In the event additional Rules and Regulations are adopted, it shall be the permit holder's responsibility to comply with such rules.

2. This permit is not transferable. Upon sale or legal transfer, the new owner or operator must apply for a permit within 30 days.

3. A new permit application must be made for new sources, replacements, alterations or design changes which may result in the issuance of, or an increase in the issuance of, air contaminants, or the use of which may eliminate or reduce or control the issuance of air contaminants.

4. Each point of emission will be provided with sampling ports, ladders, platforms, and other safety equipment to facilitate testing performed in accordance with procedures established by Part 60 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised.

5. In case of shutdown of air pollution control equipment for scheduled maintenance for a period greater than **1 hour,** the intent to shut down shall be reported to the Air Division at least 24 hours prior to the planned shutdown, **unless accompanied by the immediate shutdown of the emission source.**

6. In the event there is a breakdown of equipment in such a manner as to cause increased emission of air contaminants for a period greater than **1 hour**, the person responsible for such equipment shall notify the Air Division within an additional 24 hours and provide a statement giving all pertinent facts, including the duration of the breakdown. The Air Division shall be notified when the breakdown has been corrected.

7. This process, including all air pollution control devices and capture systems for which this permit is issued, shall be maintained and operated at all times in a manner so as to minimize the emissions of air contaminants. Procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emission of air contaminants shall be established.

8. Submittal of other reports regarding monitoring records, fuel analyses, operating rates, and equipment malfunctions may be required as authorized in the Department's air pollution control rules and regulations. The Department may require stack emission testing at any time.

9. Additions and revisions to the conditions of this Permit will be made, if necessary, to ensure that the Department's air pollution control rules and regulations are not violated.

10. Nothing in this permit or conditions thereto shall negate any authority granted to the Air Division pursuant to the Alabama Environmental Management Act or regulations issued thereunder.

11. The Air Division must be notified in writing at least 10 working days in advance of all emission tests to be conducted and submitted as proof of compliance with the Department's air pollution control rules and regulations.

    To avoid problems concerning testing methods and procedures, the following shall be included with the notification letter:

(a) The date the test crew is expected to arrive, the date and time anticipated of the start of the first run, how many and which sources are to be tested, and the names of the persons and/or testing company that will conduct the tests.

(b) A complete description of each sampling train to be used, including type of media used in determining gas stream components, type of probe lining, type of filter media, and probe cleaning method and solvent to be used (if test procedure requires probe cleaning).

(c) A description of the process(es) to be tested, including the feed rate, any operating parameter used to control or influence the operations, and the rated capacity.

(d) A sketch or sketches showing sampling point locations and their relative positions to the nearest upstream and downstream gas flow disturbances.

A pretest meeting may be held at the request of the source owner or the Department. The necessity for such a meeting and the required attendees will be determined on a case-by-case basis.

All test reports must be submitted to the Air Division within 30 days of the actual completion of the test, unless an extension of time is specifically approved by the Air Division.

12. Any performance tests required shall be conducted and data reduced in accordance with the test methods and procedures contained in each specific permit condition unless the Director (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) approves the use of an equivalent method, or (3) approves the use of an alternative method, the results of which he has determined to be adequate for indicating whether a specific source is in compliance.

13. This permit is issued with the condition that, should obnoxious odors arising from the plant operations be verified by Air Division inspectors, measures to abate the odorous emissions shall be taken upon a determination by the Alabama Department of Environmental Management that these measures are technically and economically feasible.

14. Precautions shall be taken to prevent fugitive dust emanating from plant roads, grounds, stockpiles, screens, dryers, hoppers, ductwork, etc.

Plant or haul roads and grounds will be maintained in the following manner so that dust will not become airborne. A minimum of one, or a combination, of the following methods shall be utilized to minimize airborne dust from plant or haul roads and grounds:

(a) by the application of water any time the surface of the road is sufficiently dry to allow the creation of dust emissions by the act of wind or vehicular traffic;

(b) by reducing the speed of vehicular traffic to a point below that at which dust emissions are created;

(c) by paving;

(d) by the application of binders to the road surface at any time the road surface is found to allow the creation of dust emissions;

Should one, or a combination, of the above methods fail to adequately reduce airborne dust from plant or haul roads and grounds, alternative methods shall be employed, either exclusively or in combination with one or all of the above control techniques, so that dust will not become airborne. Alternative methods shall be approved by the Department prior to utilization.

15. Precautions shall be taken by the permittee and its personnel to ensure that no person shall ignite, cause to be ignited, permit to be ignited, or maintain any open fire in such a manner as to cause the Department's rules and regulations applicable to open burning to be violated.

16. In accordance with ADEM Admin. Code. r. 335-3-4-.01(1), any source of particulate emissions shall not discharge more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%. Opacity shall be determined by 40 CFR Part 60, Appendix A, Method 9.

17. The permittee shall not use as a defense in an enforcement action that maintaining compliance with conditions of this permit would have required halting or reducing the permitted activity.

18. The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege.

19. The particulate matter (PM) emissions from facility shall not exceed 90 tons per year.

20. This source shall not operate unless emissions are vented to the control device.